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Abstract of the Disclosure

An optical sampling method and apparatus are provided for modulating an optical signal using a first electroabsorption modulator (EAM) driven by a sinusoidal RF voltage signal to provide substantially jitter free temporal gating of the optical signal. The gated optical signal from the first EAM is routed through a second EAM to provide an optical output signal having a reduced repetition rate. The second EAM is driven using an electrical pulse train having a repetition rate that is a subharmonic of the frequency of the sinusoidal RF voltage signal driving the first EAM.